Application No.: NEW Docket No.: 0283-0224PUS1

## **AMENDMENTS TO THE SPECIFICATION**

#### IN THE SPECIFICATION:

## Page 16

Please amend the Specification on page 16 beginning at line 13 as follows:

The 2-substituted acetic acid ester to be used in the cyclization step of the present invention is shown by the above-mentioned formula (6). In the formula (6), R represents the above-mentioned groups, and  $\mathbb{R}^4$   $\mathbb{R}^3$  represents a hydrocarbon group. As the above-mentioned hydrocarbon group, there may be mentioned, for example, a linear or branched alkyl group having 1 to 6 carbon atoms such as a methyl group, an ethyl group, a propyl group, a butyl group, a pentyl group, a hexyl group, etc.; a cycloalkyl group having 3 to 10 carbon atoms such as a cyclopropyl group, a cyclobutyl group, a cyclopentyl group, a cyclohexyl group, etc.; an aralkyl group in which a linear or branched alkyl group having 1 to 3 carbon atoms is bonded to an aryl group, such as a benzyl group, a phenethyl group, a phenylpropyl group, etc.; an aryl group having 6 to 20 carbon atoms such as a phenyl group, a tolyl group, a xylyl group, a mesityl group, a naphthyl group, etc., preferably an alkyl group, more preferably a methyl group or an ethyl group. Incidentally, these groups also contain various kinds of isomers.

Please amend the Specification on page 16 beginning at line 34 and continuing onto page 17 as follows:

As the specific examples of the 2-substituted acetic acid ester represented by the formula (6) to be used in the cyclization step of the present invention, there may be mentioned methyl cyanoacetate, ethyl cyanoacetate, n-propyl cyanoacetate, isopropyl cyanoacetate, n-butyl cyanoacetate, isobutyl cyanoacetate, tert-butyl cyanoacetate, cyclopropyl cyanoacetate, cyclobutyl cyanoacetate, cyclopentyl cyanoacetate, cyclohexyl cyanoacetate, benzyl cyanoacetate, phenyl eyanoacetate cyanoacetate, dimethyl malonate, diethyl malonate, di-n-propyl malonate, diisopropyl malonate, di-n-butyl malonate, diisobutyl malonate, di-tert-butyl malonate, dicyclopropyl malonate, dibenzyl malonate, diphenyl malonate, etc.

# Page 22

Please amend the Specification on page 22 beginning at line 31 and continuing onto page 23 as follows:

The hydrolysis decarboxylation step of the present invention is a step of preparing the 4-substituted tetrahydropyran represented by the formula (4) by subjecting the 4-substituted tetrahydropyran-4-carboxylic acid represented by the formula (3) to decarboxylation in the presence of a metal catalyst, and it may be carried out by the same method as in the decarboxylation of the above-mentioned first and the second embodiments. Specific examples of the 4-substituted tetrahydropyran-4-carboxylic acid represented by the formula (4) may include those as mentioned above.

## Page 25

Please amend the Specification on page 25 beginning at line 14 as follows:

Incidentally, 4-aminomethyltetrahydropyran which is a final product represented by the formula (9) and an acid salt thereof may be isolated and purified by, for example, after completion of the reaction, a general method such as filtration, concentration, distillation, recrystallization, column chromatography, etc. Also, after completion of the reaction, it is desired to carry out a post-treatment of the reaction mixture by using an amine such as triethylamine, tetraethylenepentamine, tetraethylenehexamine, pentaethylene hexamine, etc. By using these amines, there are merits that, for example, solidification of the liquid in a reactor due to aggregation of Raney nickel can be prevented during distillation of the 4-aminomethyltetrahydropyran, a free 4-aminomethyltetrahydropyran can be prepared by removing carbon dioxide from a by-produced carbonic acid salt of the 4-aminomethyltetrahydropyran, and, contamination of ammonia in the 4-aminomethyltetrahydropyran can be prevented.

<u>Page 35</u>

Please amend the Specification on page 35 beginning at line 18 as follows:

In a flask made of glass equipped with a stirring device, a thermometer and a dropping funnel and having an inner volume of 50 ml were charged the above-mentioned tetrahydropyran-4,4-dicarboxylic acid, 17.6 ml of pyridine and 123.1 mg (0.86 mmol) of copper(I) oxide, and the mixture was subjected to decarboxylation under nitrogen atmosphere at 110 to 120°C for 1 hour. After completion of the reaction, the mixture was cooled to room temperature, 30 ml of water, 30 ml (360 mmol) of conc. hydrochloric acid and 60 ml of ethyl acetate were successively added in this order, and the aqueous layer and the organic layer were separated. After the aqueous layer was washed three times with each 60 ml of ethyl acetate, these extracts and the organic layer were combined and concentrated under reduced pressure to give 3.15 3.15 g (Isolation yield: 24.2%) of tetrahydropyran-4-carboxylic acid with purity of 100% (analytical value by differential refractometry) as white crystals.